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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,687	12/27/2001	Atsushi Marugame	Q67898	9339

7590 11/09/2005
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER	
DURNFORD GESZVAIN, DILLON	
ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/026,687		MARUGAME, ATSUSHI	
	Examiner		Art Unit	
	Dillon Durnford-Geszvain		2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 is/are allowed.
- 6) ☒ Claim(s) 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 7 line 3 "in Fig. 1 is sine wave" should be --in Fig. 1 is a sine wave--.

Appropriate correction is required.

Claim Objections

2. Claim **21** is objected to because of the following informalities: in line 5 "incd" should be stricken from the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims **18-21** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim **18** is drawn to "[a] program that makes a computer ...". As it is not made clear in the claim that the program is encoded on a computer readable medium it is held to be a computer program per se and does not meet the statutory requirements set forth in 35 USC 101 (See Annex IV (pages 50-57) of the pdf document "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" on the website

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf for guidelines as to what is and is not statutory).

If the applicant were to amend the claim to make it clear that the program is encoded on a computer-readable medium the claim would be held to be statutory.

Also note that the Examiner finds the language of claim **18** to be awkward, as it seems that the program is constructing a computer.

Claims **19-21** are also held to be non-statutory as they are drawn to a computer program. The applicant would also need to amend these claims to make clear that the program is encoded on a computer-readable medium in order for them to be considered statutory subject matter under 35 USC 101.

Allowable Subject Matter

4. Claims **1-17** are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: As to claim **1**, the cited prior art (cited in the conclusion of this Office Action) does not anticipate nor render obvious the claimed invention. The prior art does teach a difference image generating section which generates a difference image between a first image picked up when a visible light is irradiated from a flash and a second image picked up when said flash is not emitted for the purpose of extracting a subject area (see the abstract of Japanese published application submitted by applicant no. 10-

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243387).

The cited prior art also discloses a space-frequency characteristic pattern irradiating section which irradiates visible light which has passed through an optical filter having a predetermined space frequency (see US 5,061,995 (Lia et al.)). However, the cited art does not use this light to perform feature extraction. The light is used in an endoscope for determining the size of features by comparing them with the shadow cast by the filter.

None of the cited prior art discloses a space-frequency irradiating section which irradiates light which has passed through an optical filter and using this light along with a differencing section which differences a picture taken with the flash and a picture taken without the flash, and a space-frequency transforming section that transforms the difference data into the frequency domain in order to collate this data with the known spatial frequency of the emitted light in order to extract a subject image that can be outputted separately from the background.

As to claim 13, this claim is simply a method directed to a method for performing the functions of the apparatus of claim 1 and is therefore allowable for the same reasons as those stated for claim 1.

As to claim 7, the limitations of claim 7 are similar to the limitations of claim 1 except that they further limit the language of claim 1 by claiming a processor and a

storage storing a program for executing the functions of claim 1 and is therefore allowable for the same reasons as those stated for claim 1.

Claims 2-6, 8-12 and 14-17 are allowable as they depend from claims that are allowable.

As to claims 18-21, claim 18 would be allowable as being a program for carrying out the steps of the method claimed in claim 13. The claims 19-21 would be allowable as depending on a claim that was found to be allowable. However, instant claims 18-21 are not allowable, as they have not met the statutory requirements set forth in 35 USC 101.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,061,995 (Lia et al.) teaches an endoscope having an optical filter with a spatially varying opacity which the light emitted by the light source passes through for the purpose of judging the size of objects. US 5,682,201 (Ogawa) teaches a digital camera with an electronic flash device which emits light during one exposure and not during a second exposure and a differencing section which subtracts one image from the other. US 6,256,067 (Yamada) uses a flash device that emits amplitude modulated light and an imager that responds preferentially to amplitude modulated light in order to perform subject area extraction. US Pre-Grant Publication 2002/0044691

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(Matsugu) teaches subject are extraction using templates or human intervention such as pointing at an object on a computer screen with a mouse cursor.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571) 272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dillon Durnford-Geszvain

11/4/2005


DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER